Micromax™ PE839

Electronic Inks and Pastes

Sintering Silver Conductor

Micromax™ PE839 is highly conductive silver conductor with low temperature sintering. High resolution Ag pattern can be achieved by using photolithography and wet etching process.

Product benefits

- Excellent electrical conductivity
- Low sintering temperature as low as 130°C
- Good adhesion on PET and customized substrates
- High resolution fine line patterning
- Compatible with photolithographic/etching process
- Flexible and Bendable
- Cadmium, Lead, Nickel and Phthalate free*

*Cadmium, Lead, Nickel and Phthalate 'free' as used herein means that cadmium, lead, nickel, and phthalate are not intentional ingredients in and are not intentionally added to the referenced product. Trace amounts however may be present.

Product information

Solid content	87 - 89[1]	%

[1]: 150°C

Rheological properties

Viscosity	2 - 3[2]	Pa.s

[2]: Brookfield LVT, #14 Spindle at 10 RPM, 25°C

Application technique

Mask mesh	640[3]	
Drying time	30	min
Drying temperature	130	°C
Recommended film thickness, dried	1 - 2[4]	µm

[3]: Screen Types: Stainless steel

[4]: with 640-mesh stainless steel screen

Micromax™ PE839

Electronic Inks and Pastes

Electrical properties

Volume resistivity	≤20[5]	µOhm.cm

[5]: at 1-2µm dried print thickness at 130°C/30min on ST505 PET film

Storage and stability

Shelf life	2[6]	months

[6]: in unopened containers, from date of shipment, at temperature between 0-5°C

Additional information

How to use

Processing

- Substrates
  - PET, customized substrates
- Screen types
  - Stainless steel
- Typical thickness
  - Printed with 640-mesh stainless steel screen
  - 1 - 2 µm
- Clean-up solvent
  - Butyl carbitol, Isopropyl alcohol
- Drying
  - 130°C for 30 minutes

Properties

- Information in this datasheet shows anticipated typical physical properties for Micromax™ PE839 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

Storage and shelf life

Containers should be stored, tightly sealed, in a clean, stable environment at refrigerated condition (0~5°C). Shelf life of material in unopened containers is two months from date of shipment with refrigerated storage condition (5°C). By freezed storage condition (-20°C), shelf life extend to five months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

Safety and handling

Micromax™ PE839

Electronic Inks and Pastes

For safety and handling information pertaining to this product, read Safety Data Sheet (SDS).

Revised: 2023-06-21 Source: Celanese Materials Database